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FILE COVERS 1907 - 7 Oct 2004 VOL 141 ISS 15  
FILE LAST UPDATED: 6 Oct 2004 (20041006/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s composi? and demineraliz? and bone matrix
1223225 COMPOSIT?
1299047 COMPN
521220 COMPNS
1590666 COMPN
      (COMPN OR COMPNS)
2314620 COMPOSIT?
      (COMPOSIT? OR COMPN)
      11285 DEMINERALIZ?
      161666 BONE
      20891 BONES
      167426 BONE
      (BONE OR BONES)
      431946 MATRIX
      58511 MATRIXES
      7965 MATRICES
      462215 MATRIX
      (MATRIX OR MATRIXES OR MATRICES)
      2496 BONE MATRIX
      (BONE(W) MATRIX)
L1      117 COMPOSIT? AND DEMINERALIZ? AND BONE MATRIX

=> s L1 and English/la
      13729964 ENGLISH/LA
L2      110 L1 AND ENGLISH/LA

=> s martin g/in
L3      23 MARTIN G/IN

=> s martin g/au
L4      851 MARTIN G/AU

=> dup rem
ENTER L# LIST OR (END):L3,L4
PROCESSING COMPLETED FOR L3
PROCESSING COMPLETED FOR L4
L5      849 DUP REM L3,L4 (25 DUPLICATES REMOVED)

=> s composi?/ti and demineraliz?/ti and bone matrix/ti
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      292 COMPN/TI
      295 COMPNS/TI
      587 COMPN/TI
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 ((COMPOSIT? OR COMPONENT)/TI)  
 2292 DEMINERALIZ?/TI  
 46872 BONE/TI  
 2768 BONES/TI  
 49501 BONE/TI  
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 73912 MATRIX/TI  
 8779 MATRIXES/TI  
 4234 MATRICES/TI  
 86580 MATRIX/TI  
 ((MATRIX OR MATRIXES OR MATRICES)/TI)  
 494 BONE MATRIX/TI  
 ((BONE(W)MATRIX)/TI)  
L6 5 COMPOSIT?/TI AND DEMINERALIZ?/TI AND BONE MATRIX/TI

=> d L6 1-5 ibib,abs

L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:220245 CAPLUS

DOCUMENT NUMBER: 140:259173

TITLE: **Compositions** comprising bone marrow cells,  
**demineralized bone matrix**  
 and RTG polymers for the induction of bone and  
 cartilage formation

INVENTOR(S): Slaviv, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda  
 S.; Cohn, Daniel; Sosnik, Alejandro

PATENT ASSIGNEE(S): Yissum Research Development Company of the Hebrew  
 University of Jerusalem, Israel; Hadasit Medical  
 Research Services & Development Ltd.

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022120	A1	20040318	WO 2002-IL736	20020904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2004022121	A1	20040318	WO 2003-IL728	20030904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:

WO 2002-IL736

A 20020904

AB A composition comprising bone marrow cells (BMC) and demineralized bone matrix (DBM) or demineralized tooth matrix (DTM), together with a reverse thermogelating polymer (RTG), e.g., Pluronic, poly(ether-ester), or poly(ether-carbonate). The composition optionally further comprises bone morphogenetic protein/s (BMP) and/or other active agents, particularly for use in the transplantation of mesenchymal progenitor cells into a joint or a cranio-facial-maxillary bone, alveolar bone of maxilla and mandibula, spine, pelvis or long bones, or for construction or reconstruction of any extra-skeletal bone, including for mech. or biol. support of artificial implants to the joint or of the joint or to the bone, for restoring and/or enhancing the formation of a new hyaline cartilage and subchondral bone structure. The BMC-DBM-RTG composition of the invention may be used for the treatment of hereditary or acquired bone disorders, hereditary or acquired cartilage disorders, primary or secondary malignant bone or cartilage disorders, metabolic bone diseases, or lesions caused by trauma, infection, any inflammatory process due to unknown or autoimmune etiol., conditions involving bone or cartilage deformities and Paget's disease. The composition may further be used for the correction of complex fractures, bone replacement and formation of new bone in plastic or sexual surgery, for support of implants of joints, cranio-facial-maxillary bones, or other musculoskeletal implants, including any artificial or musculoskeletal implants. The composition may further be used for treating damaged joints or degenerative arthropathy associated with malformation and/or dysfunction of cartilage, subchondral, and/or any other part of the bone. A kit is provided for performing transplantation of the composition into a joint, maxillary or mandibular alveolar bone or any bony structure of a mammal, including support of artificial implants.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:695826 CAPLUS

DOCUMENT NUMBER: 137:222117

TITLE: **Compositions** comprising bone marrow cells together with **demineralized** and/or mineralized **bone matrix** for the induction of bone and cartilage formation

INVENTOR(S): Slaviv, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda S.; Prigozhina, Tatyana

PATENT ASSIGNEE(S): Hadasit Medical Research Services and Development Ltd., Israel

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002070023	A2	20020912	WO 2002-IL172	20020305
WO 2002070023	A3	20040219		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1411994	A2	20040428	EP 2002-701530	20020305
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

US 2004170610 A1 20040902 US 2004-471031 20040419  
 PRIORITY APPLN. INFO.: IL 2001-141813 A 20010305  
 WO 2002-IL172 W 20020305

AB A composition comprises bone marrow cells (BMC) and demineralized bone matrix (DBM) and/or mineralized bone matrix (MBM) and optionally comprising bone morphogenetic protein/s (BMP) and/or other active agents, particularly for use in the transplantation of mesenchymal progenitor cells into a joint and/or a cranio-facial-maxillary bone, for restoring and/or enhancing the formation of a new hyaline cartilage and subchondral bone structure. The composition of the invention and method of treatment employing the same may be used for the treatment of hereditary or acquired bone disorders, hereditary or acquired cartilage disorders, malignant bone or cartilage disorders, metabolic bone diseases, bone infections, conditions involving bone or cartilage deformities and Paget's disease. The composition and method may further be used for the correction of complex fractures, bone replacement and formation of new bone in plastic or sexual surgery, for support of implants of joints, cranio-facial-maxillary bones, or other musculoskeletal implants, including artificial implants. The method of the invention may further be used for treating damaged joints or degenerative arthropathy associated with malformation and/or dysfunction of cartilage and/or subchondral bone. A kit is provided for performing transplantation into a joint or a cranio-facial-maxillary bone of a mammal of the composition of the invention.

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:695798 CAPLUS

DOCUMENT NUMBER: 137:237783

TITLE: **Compositions** comprising bone marrow cells together with **demineralized** and/or mineralized **bone matrix** for bone marrow transplantation

INVENTOR(S): Slaviv, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda S.; Prigozhina, Tatyana

PATENT ASSIGNEE(S): Hadasit Medical Research Services and Development Ltd., Israel

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002069988	A2	20020912	WO 2002-IL171	20020305
WO 2002069988	A3	20040226		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1418926	A2	20040519	EP 2002-701529	20020305
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004525909	T2	20040826	JP 2002-569163	20020305
US 2004156834	A1	20040812	US 2004-471048	20040331
PRIORITY APPLN. INFO.:			IL 2001-141813 A 20010305	
			WO 2002-IL171 W 20020305	

AB A composition comprising bone marrow cells (BMC) and demineralized bone matrix (DBM) and/or mineralized bone matrix (MBM), optionally comprising bone

morphogenetic protein (BMP), particularly for use in bone marrow transplantation, into bone marrow cavity or into extraskeletal sites, and methods of transplantation/implantation thereof. The composition and methods of the invention enable restoring and/or enhancing the formation of hematopoietic microenvironment originating from the transplanted BMC, and are useful in the treatment of hematopoietic disorders, such as deficiency of stem cells and/or their products, genetic conditions resulting in abnormal stem cells and/or products, or hematopoietic disorders of malignant or non-malignant origin. The composition and method of the invention may also be used for the induction of graft tolerance, for the prevention of graft-v.-host disease. It is mostly important that the comps. and methods of the invention may be applied for the treatment of diseases affecting primarily or secondarily the stromal microenvironment that supports and regulates hematopoiesis. Further provided is a kit for transplantation into a mammal of BMC in admixt. with DBM and/or MBM.

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:965987 CAPLUS  
DOCUMENT NUMBER: 124:26528  
TITLE: **Demineralized bone matrix**  
as a template for mineral-organic **composites**  
AUTHOR(S): Walsh, W. R.; Christiansen, D. L.  
CORPORATE SOURCE: Dep. of Orthopaedics, Brown Univ. Sch. of Medicine,  
Providence, RI, USA  
SOURCE: Biomaterials (1995), 16(18), 1363-71  
CODEN: BIMADU; ISSN: 0142-9612  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Mineralizing biol. tissues are complex bioceramic-biopolymer composites engineered for a variety of functions. The organic and inorg. constituents, morphol., location, orientation, crystallinity and interactions exhibit materials of extremely fine microstructure, unique mech. and phys. properties with high strength and fracture toughness compared to the individual constituents. An understanding of mineralization, ultrastructural organization and interfacial bonding forces in mineralizing biol. composite tissues, such as bone, may provide new strategies and techniques for the production of a novel class of man-made organic-ceramic composites. The present study explores the use of the organic matrix remaining after removal of the mineral phase by chelation with EDTA or solubilizing in HCl as a template for mineral deposition and the production of mineral-organic composites. Different pH conditions are employed to alter the inorg. phase which is deposited within the organic matrix. Mech. testing and ultrastructural evaluations are carried out for characterization.

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:226978 CAPLUS  
DOCUMENT NUMBER: 120:226978  
TITLE: **Composition** and methods for the generation  
of bone using **demineralized bone**  
**matrix** and transforming growth factor- $\beta$   
INVENTOR(S): Bruce, A. Gregory; Strong, D. Michael; Kibblewhite,  
Douglas J.; Gombotz, Wayne R.; Larrabee, Wayne F.;  
Purchio, Anthony F.  
PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA  
SOURCE: Eur. Pat. Appl., 19 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 585168	A2	19940302	EP 1993-402073	19930818

EP 585168 A3 19940817  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE  
 CA 2103943 AA 19940222 CA 1993-2103943 19930812  
 NO 9302912 A 19940222 NO 1993-2912 19930817  
 AU 9344680 A1 19940224 AU 1993-44680 19930818  
 JP 06157339 A2 19940603 JP 1993-207328 19930823  
 US 1992-933290 19920821

PRIORITY APPLN. INFO.:

AB Comps. and methods utilizing TGF- $\beta$  and demineralized bone matrix (DBM) are described that are capable of inducing the formation of useful, nonresorptive bone. Bone formation is stimulated by the synergistic activity of a TGF- $\beta$  mol., such as TGF- $\beta$ 1 or TGF- $\beta$ 5, with a HCl-treated DBM. Normal, hard nonresorptive bone development is stimulated and can be utilized in the treatment of fractures, skeletal defects, surgical repairs and skeletal reconstructions, such as in maxillofacial reconstructions. Implants were prepared from HCl-treated DBM and TGF- $\beta$ 1 and placed in rabbits. TGF- $\beta$ 1, at 100 and 250  $\mu$ g/g DBM, significantly enhanced bone formation.

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L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:220245 CAPLUS

DOCUMENT NUMBER: 140:259173

ENTRY DATE: Entered STN: 19 Mar 2004

TITLE: **Compositions** comprising bone marrow cells, **demineralized bone matrix** and RTG polymers for the induction of bone and cartilage formation

INVENTOR(S): Slavin, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda S.; Cohn, Daniel; Sosnik, Alejandro

PATENT ASSIGNEE(S): Yissum Research Development Company of the Hebrew University of Jerusalem, Israel; Hadasit Medical Research Services & Development Ltd.

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A61L027-38

SECONDARY: A61L027-26; A61K035-32; A61K035-28

CLASSIFICATION: 63-7 (Pharmaceuticals)

Section cross-reference(s): 35

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022120	A1	20040318	WO 2002-IL736	20020904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2004022121	A1	20040318	WO 2003-IL728	20030904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,			

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 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
 GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

WO 2002-IL736

A 20020904

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004022120	ICM	A61L027-38
	ICS	A61L027-26; A61K035-32; A61K035-28

# ABSTRACT:

A composition comprising bone marrow cells (BMC) and demineralized bone matrix (DBM) or demineralized tooth matrix (DTM), together with a reverse thermogelating polymer (RTG), e.g., Pluronic, poly(ether-ester), or poly(ether-carbonate). The composition optionally further comprises bone morphogenetic protein/s (BMP) and/or other active agents, particularly for use in the transplantation of mesenchymal progenitor cells into a joint or a cranio-facial-maxillary bone, alveolar bone of maxilla and mandibula, spine, pelvis or long bones, or for construction or reconstruction of any extra-skeletal bone, including for mech. or biol. support of artificial implants to the joint or of the joint or to the bone, for restoring and/or enhancing the formation of a new hyaline cartilage and subchondral bone structure. The BMC-DBM-RTG composition of the invention may be used for the treatment of hereditary or acquired bone disorders, hereditary or acquired cartilage disorders, primary or secondary malignant bone or cartilage disorders, metabolic bone diseases, or lesions caused by trauma, infection, any inflammatory process due to unknown or autoimmune etiol., conditions involving bone or cartilage deformities and Paget's disease. The composition may further be used for the correction of complex fractures, bone replacement and formation of new bone in plastic or sexual surgery, for support of implants of joints, cranio-facial-maxillary bones, or other musculoskeletal implants, including any artificial or musculoskeletal implants. The composition may further be used for treating damaged joints or degenerative arthropathy associated with malformation and/or dysfunction of cartilage, subchondral, and/or any other part of the bone. A kit is provided for performing transplantation of the composition into a joint, maxillary or mandibular alveolar bone or any bony structure of a mammal, including support of artificial implants.

SUPPL. TERM: bone marrow transplant reverse thermogelating polymer implant; demineralized bone matrix transplant polymer cartilage formation

INDEX TERM: Bone morphogenetic proteins  
 ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (5; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone, disease  
 (Paget's, treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Transplant and Transplantation  
 (allotransplant, bone; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Jaw  
 (alveolar bone; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone  
 (artificial; compns. comprising bone marrow cells,



demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Multiple myeloma  
(bone lesions related to; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Transplant and Transplantation  
(bone marrow; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Anti-inflammatory agents  
Antibiotics  
Bone formation  
Cartilage formation  
Human  
Immunomodulators  
Immunosuppressants  
Skull  
Spinal column  
Vertebrata  
(compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone  
(cortical, demineralized; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone, disease  
(defect, due bone metastasis; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Particles  
(demineralized bone matrix; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone  
Tooth  
(demineralized matrix; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Joint, anatomical  
(disease, treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Prosthetic materials and Prosthetics  
(implants; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone, disease  
(infection, treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Jaw  
(mandibula; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Jaw  
(maxilla; compns. comprising bone marrow cells,

demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone, neoplasm  
(metastasis, bone defects related to; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Hematopoietic precursor cell  
(neoplasm, bone lesions related to; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone, disease  
(osteopenia, treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Body, anatomical  
(pelvis; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Polyethers, biological studies  
ROLE: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(polycarbonate-; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Polyethers, biological studies  
ROLE: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(polyester-; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Polycarbonates, biological studies  
Polyesters, biological studies  
ROLE: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(polyether-; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Polymers, biological studies  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(reverse thermogelating; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Mesenchyme  
(stem cells, transplantation of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone marrow  
(transplant; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone, disease  
Bone, neoplasm  
Cartilage, disease  
Cartilage, neoplasm  
(treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: 75-44-5P, Phosgene 32200-04-7P  
ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)  
(compsns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: 500581-20-4P 671240-77-0P  
ROLE: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(compsns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: 106392-12-5, Pluronic F127  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compsns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD.

REFERENCE(S): (1) Fowler, E; JOURNAL OF PERIODONTOLOGY 2002, V73(2), P191 CAPLUS  
(2) Gensci Regeneration Lab Inc; WO 9911298 A 1999 CAPLUS  
(3) Hoechst Marion Roussel Ltd; EP 0884052 A 1998 CAPLUS  
(4) Lindholm, T; CLINICAL ORTHOPAEDICS AND RELATED RESEARCH 1982, 171, P251 MEDLINE  
(5) Prewett, A; US 5314476 A 1994

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:695826 CAPLUS

DOCUMENT NUMBER: 137:222117

ENTRY DATE: Entered STN: 13 Sep 2002

TITLE: **Compositions** comprising bone marrow cells together with **demineralized** and/or mineralized **bone matrix** for the induction of bone and cartilage formation

INVENTOR(S): Slaviv, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda S.; Prigozhina, Tatyana

PATENT ASSIGNEE(S): Hadasit Medical Research Services and Development Ltd., Israel

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A61L

CLASSIFICATION: 63-7 (Pharmaceuticals)

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002070023	A2	20020912	WO 2002-IL172	20020305
WO 2002070023	A3	20040219		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1411994	A2	20040428	EP 2002-701530	20020305
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

US 2004170610 A1 20040902 US 2004-471031 20040419  
PRIORITY APPLN. INFO.: IL 2001-141813 A 20010305  
WO 2002-IL172 W 20020305

PATENT CLASSIFICATION CODES:

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2002070023 ICM A61L

ABSTRACT:

A composition comprises bone marrow cells (BMC) and demineralized bone matrix (DBM) and/or mineralized bone matrix (MBM) and optionally comprising bone morphogenetic protein/s (BMP) and/or other active agents, particularly for use in the transplantation of mesenchymal progenitor cells into a joint and/or a cranio-facial-maxillary bone, for restoring and/or enhancing the formation of a new hyaline cartilage and subchondral bone structure. The composition of the invention and method of treatment employing the same may be used for the treatment of hereditary or acquired bone disorders, hereditary or acquired cartilage disorders, malignant bone or cartilage disorders, metabolic bone diseases, bone infections, conditions involving bone or cartilage deformities and Paget's disease. The composition and method may further be used for the correction of complex fractures, bone replacement and formation of new bone in plastic or sexual surgery, for support of implants of joints, cranio-facial-maxillary bones, or other musculoskeletal implants, including artificial implants. The method of the invention may further be used for treating damaged joints or degenerative arthropathy associated with malformation and/or dysfunction of cartilage and/or subchondral bone. A kit is provided for performing transplantation into a joint or a cranio-facial-maxillary bone of a mammal of the composition of the invention.

SUPPL. TERM: bone marrow cell bone cartilage formation

INDEX TERM: Bone, disease

(Paget's; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the induction of bone and cartilage formation)

INDEX TERM: Bone

Bone marrow

Cartilage

Human

Immunomodulators

Immunosuppressants

Transplant and Transplantation

(compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the induction of bone and cartilage formation)

INDEX TERM: Bone morphogenetic proteins

ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the induction of bone and cartilage formation)

INDEX TERM: Prosthetic materials and Prosthetics

(implants; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the induction of bone and cartilage formation)

INDEX TERM: Mesenchyme

(stem cell; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the induction of bone and cartilage formation)

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:695798 CAPLUS

DOCUMENT NUMBER: 137:237783

ENTRY DATE: Entered STN: . 13 Sep 2002

TITLE: **Compositions** comprising bone marrow cells together with **demineralized** and/or **mineralized bone matrix** for bone

INVENTOR(S): marrow transplantation  
 Slaviv, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda  
 S.; Prigozhina, Tatyana  
 PATENT ASSIGNEE(S): Hadasit Medical Research Services and Development  
 Ltd., Israel  
 SOURCE: PCT Int. Appl., 54 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 INT. PATENT CLASSIF.:  
 MAIN: A61K035-00  
 CLASSIFICATION: 63-7 (Pharmaceuticals)  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002069988	A2	20020912	WO 2002-IL171	20020305
WO 2002069988	A3	20040226		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1418926	A2	20040519	EP 2002-701529	20020305
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004525909	T2	20040826	JP 2002-569163	20020305
US 2004156834	A1	20040812	US 2004-471048	20040331
PRIORITY APPLN. INFO.:			IL 2001-141813	A 20010305
			WO 2002-IL171	W 20020305

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002069988	ICM	A61K035-00
JP 2004525909	FTERM	4C084/AA02; 4C084/AA03; 4C084/BA01; 4C084/CA18; 4C084/DB60; 4C084/MA02; 4C084/MA23; 4C084/MA65; 4C084/NA14; 4C084/ZA552; 4C084/ZA962; 4C084/ZB212; 4C084/ZB262; 4C087/AA01; 4C087/AA02; 4C087/AA03; 4C087/BB44; 4C087/BB46; 4C087/BB64; 4C087/CA04; 4C087/CA06; 4C087/MA02; 4C087/MA23; 4C087/MA65; 4C087/NA14; 4C087/ZA55; 4C087/ZA96; 4C087/ZB21; 4C087/ZB26

ABSTRACT:

A composition comprising bone marrow cells (BMC) and demineralized bone matrix (DBM) and/or mineralized bone matrix (MBM), optionally comprising bone morphogenetic protein (BMP), particularly for use in bone marrow transplantation, into bone marrow cavity or into extrasketal sites, and methods of transplantation/implantation thereof. The composition and methods of the invention enable restoring and/or enhancing the formation of hematopoietic microenvironment originating from the transplanted BMC, and are useful in the treatment of hematopoietic disorders, such as deficiency of stem cells and/or their products, genetic conditions resulting in abnormal stem cells and/or products, or hematopoietic disorders of malignant or non-malignant origin. The composition and method of the invention may also be used for the induction of graft tolerance, for the prevention of graft-v.-host disease. It is mostly important that the compns. and methods of the invention may be applied for the treatment of diseases affecting primarily or secondarily the stromal microenvironment that supports and regulates hematopoiesis. Further provided is a kit for transplantation into a mammal of BMC in admixt. with DBM and/or MBM.

SUPPL. TERM: bone marrow cell transplant; demineralized mineralized bone transplant

INDEX TERM: Transplant and Transplantation  
(bone; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for bone marrow transplantation)

INDEX TERM: Bone  
Bone marrow  
(compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for bone marrow transplantation)

INDEX TERM: Bone morphogenetic proteins  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for bone marrow transplantation)

INDEX TERM: Hematopoiesis  
(disorders; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for bone marrow transplantation)

INDEX TERM: Abdomen  
Kidney  
Liver  
Muscle  
(extraskkeletal site; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for bone marrow transplantation)

INDEX TERM: Bone  
(transplant; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for bone marrow transplantation)

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:965987 CAPLUS

DOCUMENT NUMBER: 124:26528

ENTRY DATE: Entered STN: 06 Dec 1995

TITLE: **Demineralized bone matrix**  
as a template for mineral-organic **composites**

AUTHOR(S): Walsh, W. R.; Christiansen, D. L.

CORPORATE SOURCE: Dep. of Orthopaedics, Brown Univ. Sch. of Medicine, Providence, RI, USA

SOURCE: Biomaterials (1995), 16(18), 1363-71  
CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

CLASSIFICATION: 13-6 (Mammalian Biochemistry)

**ABSTRACT:**

Mineralizing biol. tissues are complex bioceramic-biopolymer composites engineered for a variety of functions. The organic and inorg. constituents, morphol., location, orientation, crystallinity and interactions exhibit materials of extremely fine microstructure, unique mech. and phys. properties with high strength and fracture toughness compared to the individual constituents. An understanding of mineralization, ultrastructural organization and interfacial bonding forces in mineralizing biol. composite tissues, such as bone, may provide new strategies and techniques for the production of a novel class of man-made organic-ceramic composites. The present study explores the use of the organic matrix remaining after removal of the mineral phase by chelation with EDTA or solubilizing in HCl as a template for mineral deposition and the production of mineral-organic composites. Different pH conditions are employed to alter the inorg. phase which is deposited within the organic matrix. Mech. testing and ultrastructural evaluations are carried out for characterization.

SUPPL. TERM: demineralized bone matrix mineral org composite  
INDEX TERM: Bone  
(demineralized bone matrix as template for mineral-organic composites)  
INDEX TERM: 1306-06-5, Hydroxyapatite 10103-46-5, Calcium phosphate  
14567-92-1, Brushite  
ROLE: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)  
(demineralized bone matrix as template for mineral-organic composites)

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:226978 CAPLUS  
DOCUMENT NUMBER: 120:226978  
ENTRY DATE: Entered STN: 30 Apr 1994  
TITLE: **Composition and methods for the generation of bone using demineralized bone matrix and transforming growth factor- $\beta$**   
INVENTOR(S): Bruce, A. Gregory; Strong, D. Michael; Kibblewhite, Douglas J.; Gombotz, Wayne R.; Larrabee, Wayne F.; Purchio, Anthony F.  
PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA  
SOURCE: Eur. Pat. Appl., 19 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
INT. PATENT CLASSIF.:  
MAIN: A61K035-32  
SECONDARY: A61K037-02; A61L027-00  
CLASSIFICATION: 63-6 (Pharmaceuticals)  
Section cross-reference(s): 1  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 585168	A2	19940302	EP 1993-402073	19930818
EP 585168	A3	19940817		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2103943	AA	19940222	CA 1993-2103943	19930812
NO 9302912	A	19940222	NO 1993-2912	19930817
AU 9344680	A1	19940224	AU 1993-44680	19930818
JP 06157339	A2	19940603	JP 1993-207328	19930823
			US 1992-933290	19920821

PRIORITY APPLN. INFO.:

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 585168	ICM	A61K035-32
	ICS	A61K037-02; A61L027-00

ABSTRACT:

Compns. and methods utilizing TGF- $\beta$  and demineralized bone matrix (DBM) are described that are capable of inducing the formation of useful, nonresorptive bone. Bone formation is stimulated by the synergistic activity of a TGF- $\beta$  mol., such as TGF- $\beta$ 1 or TGF- $\beta$ 5, with a HCl-treated DBM. Normal, hard nonresorptive bone development is stimulated and can be utilized in the treatment of fractures, skeletal defects, surgical repairs and skeletal reconstructions, such as in maxillofacial reconstructions. Implants were prepared from HCl-treated DBM and TGF- $\beta$ 1 and placed in rabbits. TGF- $\beta$ 1, at 100 and 250  $\mu$ g/g DBM, significantly enhanced bone formation.

SUPPL. TERM: nonresorptive bone growth TGF beta; demineralized bone matrix TGF beta implant; transforming growth factor beta bone repair  
INDEX TERM: Plastics

ROLE: BIOL (Biological study)  
 (malleable osteogenic, containing demineralized bone matrix  
 and transforming growth factor- $\beta$  for stimulating  
 nonresorptive bone growth)  
 INDEX TERM: Bone, metabolism  
 (nonresorptive growth of, stimulation of, with  
 demineralized bone matrix and transforming growth  
 factor- $\beta$ )  
 INDEX TERM: Bone, neoplasm  
 (repair of lesions from, with demineralized bone matrix  
 and transforming growth factor- $\beta$ , nonresorptive bone  
 growth stimulation in)  
 INDEX TERM: Bone, disease  
 (cyst, repair of lesions from, with demineralized bone  
 matrix and transforming growth factor- $\beta$ ,  
 nonresorptive bone growth stimulation in)  
 INDEX TERM: Bone, disease  
 (fracture, repair of, with demineralized bone matrix and  
 transforming growth factor- $\beta$ , nonresorptive bone  
 growth stimulation in)  
 INDEX TERM: Dental materials and appliances  
 Prosthetic materials and Prosthetics  
 (implants, demineralized bone matrix and transforming  
 growth factor- $\beta$  in, for stimulating nonresorptive  
 bone growth)  
 INDEX TERM: Animal growth regulators  
 ROLE: BIOL (Biological study)  
 ( $\beta$ -transforming growth factors, nonresorptive bone  
 growth stimulation with demineralized bone matrix and)  
 INDEX TERM: Animal growth regulators  
 ROLE: BIOL (Biological study)  
 ( $\beta$ 1-transforming growth factors, nonresorptive bone  
 growth stimulation with demineralized bone matrix and)  
 INDEX TERM: Animal growth regulators  
 ROLE: BIOL (Biological study)  
 ( $\beta$ 5-transforming growth factors, nonresorptive bone  
 growth stimulation with demineralized bone matrix and)

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NEWS 8 AUG 27 BIOTECHABS/BIOTECHDS: Two new display fields added for legal  
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NEWS 9 SEP 01 INPADOC: New family current-awareness alert (SDI) available  
NEWS 10 SEP 01 New pricing for the Save Answers for SciFinder Wizard within  
STN Express with Discover!  
NEWS 11 SEP 01 New display format, HITSTR, available in WPIDS/WPINDEX/WPIX  
NEWS 12 SEP 14 STN Patent Forum to be held October 13, 2004, in Iselin, NJ  
NEWS 13 SEP 27 STANDARDS will no longer be available on STN  
NEWS 14 SEP 27 SWETSCAN will no longer be available on STN  
  
NEWS EXPRESS JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004  
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BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB,  
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F4	24	WPIDS
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F13	3	BIOTECHDS

F14	3	LIFESCI
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F16	2	BIOTECHNO
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F18	1	BIOBUSINESS
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F20	1	DISSABS
F21	1	EMBAL
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F24	1	PROMT

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COST IN U.S. DOLLARS

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TOTAL

ENTRY

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FULL ESTIMATED COST

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FILE 'USPATFULL' ENTERED AT 09:48:16 ON 07 OCT 2004  
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L2	415	FILE USPATFULL
L3	33	FILE IFIPAT
L4	27	FILE USPAT2
L5	24	FILE WPIDS
L6	22	FILE CAPLUS
L7	13	FILE MEDLINE
L8	13	FILE SCISEARCH
L9	11	FILE EMBASE
L10	9	FILE BIOSIS

TOTAL FOR ALL FILES

L11 567 L1

=> d L6 1-2 bib,abs

L6 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2004:414651 CAPLUS  
DN 140:395593  
TI Cohesive demineralized bone **compositions**  
IN Rosenberg, Aron D.; Gilles de Pelichy, Laurent  
PA Etex Corporation, USA  
SO U.S. Pat. Appl. Publ., 15 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004097612	A1	20040520	US 2002-298112	20021115
	WO 2004045372	A2	20040603	WO 2003-US36393	20031114
	WO 2004045372	A3	20040708		
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	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,				
	GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,				
	LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,				
	OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,				
	TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ,				
	BY, KG, KZ, MD				
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	NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,				
	GW, ML, MR, NE, SN, TD, TG				

PRAI US 2002-298112 A 20021115

AB **Demineralized bone matrix** fibers and a **demineralized bone matrix compn.** are provided for bone repair. The **demineralized bone matrix** fibers have an average fiber length in the range from about 250  $\mu$ m to about 2 mm and an aspect ratio of greater than about 4. The **demineralized bone matrix compn.** includes **demineralized bone matrix** fibers and a biocompatible liquid in an amount to produce a coherent, formable mass. The formable mass retains its cohesiveness when immersed in a liquid. Methods for making the **demineralized bone matrix** fibers and **compn.** are also provided.

L6 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:300930 CAPLUS  
DN 138:309229  
TI Improved bone graft  
IN Knaack, David; Traianedes, Kathy; Diegman, Michele; Forsyth, Nanette;  
Winterbottom, John  
PA Osteotech, Inc., USA  
SO PCT Int. Appl., 87 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003030956	A2	20030417	WO 2002-US32941	20021015
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	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
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US 2003143258 A1 20030731 US 2002-271140 20021015  
 EP 1434608 A2 20040707 EP 2002-773762 20021015

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRAI US 2001-329156P P 20011012  
 US 2002-392462P P 20020627  
 WO 2002-US32941 W 20021015

AB An improved **demineralized bone matrix** (DBM)  
 or other matrix **compn.** is provided that has been mixed with a  
 stabilizing agent that acts as (1) a diffusion barrier, (2) a enzyme  
 inhibitor, (3) a competitive substrate, or (4) a masking moiety. A  
 diffusion barrier acts as a barrier so as to protect the osteoinductive  
 factors found in DBM from being degraded by proteolytic and glycolytic  
 enzymes at the implantation site. Stabilizing agents may be any  
 biodegradable material such as starches, modified starches, cellulose,  
 dextran, polymers, proteins, and **collagen**. As the stabilizing  
 agents degrades or dissolves in vivo, the osteoinductive factors such as  
 TGF- $\beta$ , BMP, and IGF are activated or exposed, and the activated  
 factors work to recruit cells from the perivascular space to the site of  
 injury and to cause differentiation into bone-forming cells. The  
 invention also provides methods of preparing, testing, and using the  
 inventive improved osteoinductive matrix **compns.**

=> d his

(FILE 'HOME' ENTERED AT 09:33:48 ON 07 OCT 2004)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE,  
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 BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB,  
 CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 09:37:28 ON 07 OCT 2004

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SEA COMPOSIT? AND DEMINERALIZ? BONE MATRI? AND COLLAGEN

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 2 FILE BIOENG  
 9 FILE BIOSIS  
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 27 FILE USPAT2  
 24 FILE WPIDS

## 24 FILE WPINDEX

L1 QUE COMPOSIT? AND DEMINERALIZ? BONE MATRI? AND COLLAGEN

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L5 24 FILE WPIDS

L6 22 FILE CAPLUS

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L8 13 FILE SCISEARCH

L9 11 FILE EMBASE

L10 9 FILE BIOSIS

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L11 567 S L1

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MISSING OPERATOR L11 CROSS-LINK?

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L14 14 FILE USPAT2

L15 4 FILE WPIDS

L16 1 FILE CAPLUS

L17 0 FILE MEDLINE

L18 0 FILE SCISEARCH

L19 0 FILE EMBASE

L20 0 FILE BIOSIS

TOTAL FOR ALL FILES

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L16 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:455578 CAPLUS

DN ~~125:151095~~

ED Entered STN: 01 Aug 1996

TI Comparative histological study of mineralizations after intramuscular implantations of heat-denatured **demineralized bone matrix** gelatin, heat-denatured demineralized tooth, and **cross-linked collagen**

AU Ninomiya, Masami

CS Sch. Dent., Univ. Tokushima, Tokushima, 770, Japan

SO Shikoku Shigakkai Zasshi (1996), 9(1), 77-97

CODEN: SSZAED; ISSN: 0914-6091

PB Shikoku Shigakkai

DT Journal

LA Japanese

CC 63-7 (Pharmaceuticals)

AB I.m. implantation of **demineralized bone matrix**

gelatin (BMG) is known to form spherical mineralized deposits in the implant prior to bone tissue formation induced by bone morphogenetic protein (BMP). This type of mineralization is called "acellular mineral deposition (AMD)", which is not associated with osteogenic cells. In the present study, heat-denatured BMG, heat-denatured demineralized tooth, and

calf skin type I **collagen cross-linked** with glutaraldehyde were resp. implanted into the rectus abdominis muscles in rats. Then mineralized deposits formed in the implants after the resp. implantations were compared by means of histol. anal. by using light and electron microscopes. **Compns.** of these deposits were also analyzed by electron probe x-ray microanal. Heat-denatured BMG, which was prepared at 150° for 30 min to inactivate non-collagenous proteins including BMP (NCP), was used to investigate whether NCP had some roles in AMD process. Heat-denatured demineralized tooth and crosslinked **collagen** were also used to examine the relations of AMD with calcification of dentin and with matrix **collagen**. In heat-denatured BMG, spherical mineralized deposits initially appeared at day 3 and then gradually increased in the size and the number. Finally these deposits fused with each other to occupy the whole implant at day 14. Similar observations were obtained in the case of heat-denatured demineralized tooth implant. Mineralization was progressed in one way from enamel side to dental pulp side. Predentin area did not easily mineralized during the exptl. period. In crosslinked **collagen**, fiber-like mineralized deposits were scattered along **collagen** fiber bundles at day 3. These deposits gradually increased in the number and invaded into the surrounding **collagen** fibers to increase in the size, and then these deposits fused with each other to occupy the whole implant at day 14. Bone and cartilaginous tissues did not appear around the implants, and also there were no osteoblast- and osteoclast-like cells in any implants. Mineralized deposits were formed compactly showing needle-shaped crystals in all implants. **Compn.** anal. revealed that these deposits showed a similar mol. ratio of calcium to phosphorus. AMD occurs with no relation to the subsequent bone tissue formation and that NCP never have any roles in AMD process. AMD physicochem. occurs depending on **cross-linked collagen** of matrix and that AMD observed in the implanted dentin may take place in the physiol. mineralization because of the morphol. similarity between AMD and globular dentin.

- ST histol mineralization implant bone gelatin; tooth histol mineralization bone; **collagen** histol mineralization implant
- IT Bone  
Tooth  
    (histol. study of mineralizations after i.m. implantations of bone matrix gelatin and and **collagen**)
- IT Gelatins, biological studies  
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (histol. study of mineralizations after i.m. implantations of bone matrix gelatin and and **collagen**)
- IT Dental materials and appliances  
    Prosthetic materials and Prosthetics  
    (implants, histol. study of mineralizations after i.m. implantations of bone matrix gelatin and and **collagen**)
- IT **Collagens**, biological studies  
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (reaction products, histol. study of mineralizations after i.m. implantations of bone matrix gelatin and and **collagen**)

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E45	1	WO9938543/PN

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L1 QUE COMPOSIT? AND DEMINERALIZ? BONE MATRI? AND COLLAGEN

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L25 ANSWER 1 OF 1 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 1999-518296 [43] WPIDS  
 DOC. NO. NON-CPI: N1999-385472  
 DOC. NO. CPI: C1999-151269  
 TITLE: Implantable bone paste **composition** useful for  
 implantation in e.g. non-union fractures, periodontal  
 ridge augmentation and craniofacial surgery.  
 DERWENT CLASS: A11 A96 B07 D22 P34  
 INVENTOR(S): FELTON, P A; JAW, R; WIRONEN, J F  
 PATENT ASSIGNEE(S): (REGE-N) REGENERATION TECHNOLOGIES' INC; (UYFL-N) UNIV  
 FLORIDA TISSUE BANK INC; (REGE-N) REGENERATION  
 TECHNOLOGIES; (WIRO-I) WIRONEN J F; (FELT-I) FELTON P A;  
 (JAWR-I) JAW R  
 COUNTRY COUNT: 85  
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US 2002076429	A1	20020620	(200244)		

#### APPLICATION DETAILS:

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JP 2002501786	W Based on	WO 9938543

PRIORITY APPLN. INFO: US 1998-154400 19980916; US  
 1998-14519 19980128

AN 1999-518296 [43] WPIDS

AB WO 9938543 A UPAB: 19991020

NOVELTY - An implantable bone paste **composition** comprising  
 thermally sterilized gelatin as a carrier is used in a recipient as  
 substantially bioabsorbable osteogenic component.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(1) a method for inducing bone formation in vivo in a recipient  
 comprising implanting the novel **composition**;

(2) a method for making an implantable graft comprising making the novel **composition** and molding the graft from it;

(3) a method for enhancing osteoconductivity, osteoinductivity or osseointegration of an implant comprising coating the implant with the novel **composition**;

(4) implants coated with the novel **composition**.

USE - The **composition** is useful for implantation in non-union fractures, periodontal ridge augmentation, craniofacial surgery, arthrodesis of spinal or other joints, spinal fusion procedures and implant fixation (claimed).  
Dwg.0/3

=> d his

(FILE 'HOME' ENTERED AT 09:33:48 ON 07 OCT 2004)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 09:37:28 ON 07 OCT 2004

SET PLURALS ON PERM

SET ABBR ON PERM

SEA COMPOSIT? AND DEMINERALIZ? BONE MATRI? AND COLLAGEN

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1 FILE BIOBUSINESS  
2 FILE BIOENG  
9 FILE BIOSIS  
3 FILE BIOTECHABS  
3 FILE BIOTECHDS  
2 FILE BIOTECHNO  
1 FILE CANCERLIT  
22 FILE CAPLUS  
1 FILE DISSABS  
1 FILE EMBAL  
11 FILE EMBASE  
1 FILE ESBIODASE  
33 FILE IFIPAT  
1 FILE JICST-EPLUS  
3 FILE LIFESCI  
13 FILE MEDLINE  
5 FILE PASCAL  
1 FILE PROMT  
13 FILE SCISEARCH  
2 FILE TOXCENTER  
415 FILE USPATFULL  
27 FILE USPAT2  
24 FILE WPIDS  
24 FILE WPINDEX

L1 QUE COMPOSIT? AND DEMINERALIZ? BONE MATRI? AND COLLAGEN

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FILE 'USPATFULL, IFIPAT, USPAT2, WPIDS, CAPLUS, MEDLINE, SCISEARCH, EMBASE, BIOSIS' ENTERED AT 09:48:16 ON 07 OCT 2004

SET MSTEPS ON

L2 415 FILE USPATFULL  
L3 33 FILE IFIPAT  
L4 27 FILE USPAT2  
L5 24 FILE WPIDS  
L6 22 FILE CAPLUS  
L7 13 FILE MEDLINE  
L8 13 FILE SCISEARCH  
L9 11 FILE EMBASE  
L10 9 FILE BIOSIS

## TOTAL FOR ALL FILES

L11 567 S L1  
L12 172 FILE USPATFULL  
L13 4 FILE IFIPAT  
L14 14 FILE USPAT2  
L15 4 FILE WPIDS  
L16 1 FILE CAPLUS  
L17 0 FILE MEDLINE  
L18 0 FILE SCISEARCH  
L19 0 FILE EMBASE  
L20 0 FILE BIOSIS

## TOTAL FOR ALL FILES

L21 195 S L11 AND CROSS-LINK?  
L22 39 FILE USPATFULL  
L23 0 FILE IFIPAT  
L24 0 FILE USPAT2  
L25 1 FILE WPIDS  
L26 1 FILE CAPLUS  
L27 0 FILE MEDLINE  
L28 0 FILE SCISEARCH  
L29 0 FILE EMBASE  
L30 0 FILE BIOSIS

## TOTAL FOR ALL FILES

L31 41 S L21 AND PY<2001  
SEL L22 PN  
SEL L25 PN

=> d L22 1-10 ibib,abs

L22 ANSWER 1 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:128306 USPATFULL

TITLE: Chitin hydrogels, methods of their production and use

INVENTOR(S): Drohan, William N., Springfield, VA, United States

MacPhee, Martin J., Gaithersburg, MD, United States

Miekka, Shirley I., Gaithersburg, MD, United States

Singh, Manish S., Columbia, MD, United States

Elson, Clive, Halifax, Canada

Taylor, Jr., John R., New York, NY, United States

PATENT ASSIGNEE(S): Chitogenics, Inc., Morristown, NJ, United States (U.S. corporation)

The American National Red Cross, Washington, DC, United States (U.S. corporation)

Coalition for Hemophilia B, New York, NY, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION:	US 6124273	20000926	<--
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APPLICATION INFO.:	US 1997-960555	19971013	(8)
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RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-659999, filed on 7 Jun 1996, now abandoned		
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NUMBER	DATE
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PRIORITY INFORMATION:	US 1995-109P	19950609	(60)
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DOCUMENT TYPE:	Utility
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FILE SEGMENT:	Granted
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PRIMARY EXAMINER:	Fonda, Kathleen K.
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LEGAL REPRESENTATIVE:	Lahive & Cockfield, LLP
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NUMBER OF CLAIMS:	32
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EXEMPLARY CLAIM:	1
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NUMBER OF DRAWINGS:	6 Drawing Figure(s); 3 Drawing Page(s)
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LINE COUNT:	2441
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to the preparation and utilization of supplemented chitin hydrogels, such as chitosan hydrogels. Further provided are biomaterials comprising same. The particular supplement delivered by the chitin hydrogel is selected as a function of its intended use. In one embodiment, this invention provides a **composition** of matter, comprising a chitin hydrogel or chitin-derived hydrogel, wherein the hydrogel does not inhibit full-thickness skin wound healing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 2 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:121069 USPATFULL  
TITLE: Supplemented and unsupplemented tissue sealants, method of their production and use  
INVENTOR(S): MacPhee, Martin James, Gaithersburg, MD, United States  
Drohan, William Nash, Springfield, VA, United States  
Liau, Gene, Darnestown, MD, United States  
Haudenschild, Christian, Rockville, MD, United States  
PATENT ASSIGNEE(S): The American National Red Cross, Falls Church, VA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6117425		20000912	<--
APPLICATION INFO.:	US 1995-474086		19950607	(8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-351006, filed on 7 Dec 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-328552, filed on 25 Oct 1994, now abandoned which is a continuation of Ser. No. US 1993-31164, filed on 12 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1990-618419, filed on 27 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1991-798919, filed on 27 Nov 1991, now abandoned			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Woodward, M Patrick			
ASSISTANT EXAMINER:	Zeman, Mary K			
LEGAL REPRESENTATIVE:	Sterne, Kessler Goldstein & Fox P.L.L.C.			
NUMBER OF CLAIMS:	57			
EXEMPLARY CLAIM:	1,2,3			
NUMBER OF DRAWINGS:	53 Drawing Figure(s); 36 Drawing Page(s)			
LINE COUNT:	4910			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides supplemented tissue sealants, methods for their production and use thereof. Disclosed are tissue sealants supplemented with at least one cytotoxin or cell proliferation inhibiting **composition**. The **composition** may be further supplemented with, for example, one or more antibodies, analgesics, anticoagulants, anti-inflammatory compounds, antimicrobial **compositions**, cytokines, drugs, growth factors, ~~interferons~~, hormones, lipids, demineralized bone or bone morphogenetic proteins, cartilage inducing factors, oligonucleotides polymers, polysaccharides, polypeptides, protease inhibitors, vasoconstrictors or vasodilators, vitamins, minerals, stabilizers and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 3 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:117704 USPATFULL  
TITLE: Methods for inhibiting the advanced glycosylation of proteins  
INVENTOR(S): Cerami, Anthony, New York, NY, United States

PATENT ASSIGNEE(S): Ulrich, Peter C., Old Tappan, NJ, United States  
Brownlee, Michael A., New York, NY, United States  
The Rockefeller University, New York, NY, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6114323		20000905 <--
APPLICATION INFO.:	US 1998-215612		19981217 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-784861, filed on 16 Jan 1997, now patented, Pat. No. US 5852009 which is a continuation-in-part of Ser. No. US 1995-487059, filed on 7 Jun 1995, now patented, Pat. No. US 5612332 which is a division of Ser. No. US 1994-274243, filed on 13 Jul 1994, now abandoned which is a division of Ser. No. US 1992-889141, filed on 27 May 1992, now patented, Pat. No. US 5356895 which is a division of Ser. No. US 1990-605654, filed on 30 Oct 1990, now patented, Pat. No. US 5140048 which is a continuation-in-part of Ser. No. US 1988-264930, filed on 2 Nov 1988, now patented, Pat. No. US 4983604 which is a continuation-in-part of Ser. No. US 1987-119958, filed on 13 Nov 1987, now patented, Pat. No. US 4908446 which is a continuation-in-part of Ser. No. US 1985-798032, filed on 14 Nov 1985, now patented, Pat. No. US 4758583 which is a continuation-in-part of Ser. No. US 1984-590820, filed on 19 Mar 1984, now patented, Pat. No. US 4665192		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Higel, Floyd D.		
LEGAL REPRESENTATIVE:	Klauber & Jackson		
NUMBER OF CLAIMS:	32		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 5 Drawing Page(s)		
LINE COUNT:	1181		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods for inhibiting protein aging. Accordingly, methods are disclosed for treating an animal to inhibit the formation of advanced glycosylation end products of target proteins with the animal by administering a pharmaceutical **composition** comprising an agent capable of reacting with the carbonyl moiety of the early glycosylation product, whereby the subsequent **cross-linking** of the early glycosylation product is inhibited. Agents of the present invention comprise aminoguanidine, its pharmaceutically acceptable salts, and mixtures thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 4 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:74106 USPATFULL  
TITLE: Recombinant production of latent TGF-beta binding protein-3 (LTBP-3)  
INVENTOR(S): Bonadio, Jeffrey, Ann Arbor, MI, United States  
Yin, Wushan, Ann Arbor, MI, United States  
PATENT ASSIGNEE(S): The Regents of The University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6074840		20000613 <--
APPLICATION INFO.:	US 1995-479722		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 1995-US2251, filed on 21 Feb 1995 which is a continuation-in-part of Ser. No. US 1994-316650, filed on 30 Sep 1994, now patented,		



Pat. No. US 5942496 which is a continuation-in-part of  
Ser. No. US 1994-199780, filed on 18 Feb 1994, now  
patented, Pat. No. US 5763416

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Fitzgerald, David L.  
LEGAL REPRESENTATIVE: William, Morgan & Amerson  
NUMBER OF CLAIMS: 43  
EXEMPLARY CLAIM: 1,20  
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 8 Drawing Page(s)  
LINE COUNT: 4758

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are novel nucleic acid and peptide **compositions**  
comprising latent TGF $\beta$  binding proteins (LTBPs). Also disclosed are  
methods of using LTBP-2 and LTBP-3 peptides and the DNA segments which  
encode them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 5 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:50372 USPATFULL  
TITLE: Supplemented and unsupplemented tissue sealants,  
methods of their production and use  
INVENTOR(S): MacPhee, Martin James, Gaithersburg, MD, United States  
Drohan, William Nash, Springfield, VA, United States  
Woolverton, Christopher J., Kent, OH, United States  
PATENT ASSIGNEE(S): The American National Red Cross, Washington, DC, United  
States (U.S. government)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6054122		20000425	<--
APPLICATION INFO.:	US 1995-479034		19950607	(8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-351006, filed on 7 Dec 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-328552, filed on 25 Oct 1994, now abandoned which is a continuation of Ser. No. US 1993-31164, filed on 12 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1990-618419, filed on 27 Nov 1990, now abandoned And a continuation-in-part of Ser. No. US 1991-798919, filed on 27 Nov 1991, now abandoned			

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Smith, Lynette F.  
ASSISTANT EXAMINER: Zeman, Mary K  
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.  
NUMBER OF CLAIMS: 43  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 50 Drawing Figure(s); 36 Drawing Page(s)  
LINE COUNT: 4855

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a fibrin sealant dressing, wherein said fibrin  
sealant may be supplemented with at least one **composition**  
selected from, for example, one or more regulatory compounds, antibody,  
antimicrobial **compositions**, analgesics, anticoagulants,  
antiproliferatives, anti-inflammatory compounds, cytokines, cytotoxins,  
drugs, growth factors, interferons, hormones, lipids, demineralized bone  
or bone morphogenetic proteins, cartilage inducing factors,  
oligonucleotides polymers, polysaccharides, polypeptides, protease  
inhibitors, vasoconstrictors or vasodilators, vitamins, minerals,  
stabilizers and the like. Also disclosed are methods of preparing and/or  
using the unsupplemented or supplemented fibrin sealant dressing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 6 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:44203 USPATFULL  
TITLE: **Compositions** and therapeutic methods using  
morphogenic proteins and stimulatory factors  
INVENTOR(S): Lee, John C., San Antonio, TX, United States  
Yeh, Lee-Chuan C., San Antonio, TX, United States  
PATENT ASSIGNEE(S): Stryker Corporation, Kalamazoo, MI, United States (U.S.  
corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6048964		20000411	<--
APPLICATION INFO.:	US 1995-570752		19951212	(8)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Nutter, Nathan M.			
LEGAL REPRESENTATIVE:	Fish & Neave, Haley, Jr., James F., Ruskin, Barbara A.			
NUMBER OF CLAIMS:	21			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	12 Drawing Figure(s); 12 Drawing Page(s)			
LINE COUNT:	3062			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides pharmaceutical **compositions** comprising a morphogenic protein stimulatory factor (MPSF) for improving the tissue inductive activity of morphogenic proteins, particularly those belonging to the BMP protein family. Methods for improving the tissue inductive activity of a morphogenic protein in a mammal using those **compositions** are provided. This invention also provides implantable morphogenic devices comprising a morphogenic protein and a MPSF disposed within a carrier, that are capable of inducing tissue formation in allogeneic and xenogeneic implants. Methods for inducing local tissue formation from a progenitor cell in a mammal using those devices are also provided. A method for accelerating allograft repair in a mammal using morphogenic devices is provided. This invention also provides a prosthetic device comprising a prosthesis coated with a morphogenic protein and a MPSF, and a method for promoting in vivo integration of an implantable prosthetic device to enhance the bond strength between the prosthesis and the existing target tissue at the joining site. Methods of treating tissue degenerative conditions in a mammal using the pharmaceutical **compositions** are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 7 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:21736 USPATFULL  
TITLE: Terminally sterilized osteogenic devices and  
preparation thereof  
INVENTOR(S): Tucker, Marjorie M., Holliston, MA, United States  
Rueger, David C., Southborough, MA, United States  
Sampath, Kuber T., Holliston, MA, United States  
PATENT ASSIGNEE(S): Stryker Corporation, Kalamazoo, MI, United States (U.S.  
corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6028242		20000222	<--
APPLICATION INFO.:	US 1997-881307		19970624	(8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-478452, filed on 7 Jun 1995, now patented, Pat. No. US 5674292			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			

PRIMARY EXAMINER: Isabella, David J.  
ASSISTANT EXAMINER: Black, John M.  
LEGAL REPRESENTATIVE: Testa, Hurwitz & Thibeault, LLP  
NUMBER OF CLAIMS: 24  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)  
LINE COUNT: 1416

AB Disclosed are terminally sterilized osteogenic devices for implantation into a mammal. The devices contain a combination of a biologically active osteogenic protein and an insoluble carrier which after being combined are sterilized by exposure to ionizing radiation, for example, by exposure to gamma rays or an electron beam. The terminally sterilized devices of the invention are characterized in that they induce bone formation following implantation into a mammal. Also disclosed is a method for inducing bone formation in a mammal by implanting a terminally sterilized device of the invention into a preselected locus in a mammal. Also disclosed is a method for preparing the terminally sterilized device of the invention.

L22 ANSWER 8 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:5017 USPATFULL  
TITLE: Terminally sterilized osteogenic devices and preparation thereof  
INVENTOR(S): Tucker, Marjorie M., Holliston, MA, United States  
Rueger, David C., Southborough, MA, United States  
Sampath, Kuber T., Holliston, MA, United States  
PATENT ASSIGNEE(S): Stryker Corporation, Hopkinton, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6013856		20000111	<--
APPLICATION INFO.:	US 1998-159535		19980923	(9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-881307, filed on 24 Jun 1997 which is a division of Ser. No. US 1995-478452, filed on 7 Jun 1995, now patented, Pat. No. US 5674292			

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Smith, Jeffrey A.  
ASSISTANT EXAMINER: Robert, Eduardo C.  
LEGAL REPRESENTATIVE: Testa, Hurwitz & Thibeault LLP  
NUMBER OF CLAIMS: 34  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)  
LINE COUNT: 1444

AB Disclosed are terminally sterilized osteogenic devices for implantation into a mammal. The devices contain a combination of a biologically active osteogenic protein and an insoluble carrier which after being combined are sterilized by exposure to ionizing radiation, for example, by exposure to gamma rays or an electron beam. The terminally sterilized devices of the invention are characterized in that they induce bone formation following implantation into a mammal. Also disclosed is a method for inducing bone formation in a mammal by implanting a terminally sterilized device of the invention into a preselected locus in a mammal. Also disclosed is a method for preparing the terminally sterilized device of the invention.

L22 ANSWER 9 OF 39 USPATFULL on STN

ACCESSION NUMBER: 1999:117013 USPATFULL  
TITLE: Devices comprising chondrogenic protein and methods of inducing endochondral bone formation therewith

INVENTOR(S) : Oppermann, Hermann, Medway, MA, United States  
 Ozkaynak, Engin, Milford, MA, United States  
 Kuberasampath, Thangavel, Medway, MA, United States  
 Rueger, David C., Hopkinton, MA, United States  
 Pang, Roy H. L., Medway, MA, United States  
 PATENT ASSIGNEE(S) : Stryker Biotech Corporation, Kalamazoo, MI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5958441		19990928 <--
APPLICATION INFO.:	US 1995-449699		19950524 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-147023, filed on 1 Nov 1993, now patented, Pat. No. US 5468845 which is a division of Ser. No. US 1992-841646, filed on 21 Feb 1992, now patented, Pat. No. US 5266683 which is a continuation-in-part of Ser. No. US 1992-827052, filed on 28 Jan 1992, now patented, Pat. No. US 5250302 Ser. No. Ser. No. US 1990-579865, filed on 7 Sep 1990, now patented, Pat. No. US 5108753 Ser. No. Ser. No. US 1990-621849, filed on 4 Dec 1990, now abandoned Ser. No. Ser. No. US 1992-995345, filed on 22 Dec 1992, now patented, Pat. No. US 5258494 Ser. No. Ser. No. US 1991-810560, filed on 20 Dec 1991, now abandoned Ser. No. Ser. No. US 1990-569920, filed on 20 Aug 1990, now abandoned Ser. No. Ser. No. US 1990-600024, filed on 18 Oct 1990, now abandoned Ser. No. Ser. No. US 1990-599543, filed on 18 Oct 1990, now abandoned Ser. No. Ser. No. US 1990-616374, filed on 21 Nov 1990, now patented, Pat. No. US 5162114 And Ser. No. US 1990-483913, filed on 22 Feb 1990, now patented, Pat. No. US 5171574 which is a continuation-in-part of Ser. No. US 1989-422613, filed on 17 Oct 1989, now patented, Pat. No. US 4975526 And Ser. No. US 1989-315342, filed on 23 Feb 1989, now patented, Pat. No. US 5011691 , said Ser. No. US 827052 And Ser. No. US 579865 which is a division of Ser. No. US 1988-179406, filed on 8 Apr 1988, now patented, Pat. No. US 4968590 , said Ser. No. US 621849 which is a division of Ser. No. US 1988-232630, filed on 15 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 179406 , said Ser. No. US 995345 which is a continuation of Ser. No. US 1990-621988, filed on 4 Dec 1990, now abandoned which is a division of Ser. No. US 1989-315342, filed on 23 Feb 1989, now patented, Pat. No. US 5011691 which is a continuation-in-part of Ser. No. US 232630 , said Ser. No. US 810560 which is a continuation of Ser. No. US 1991-660162, filed on 22 Feb 1991, now abandoned which is a continuation of Ser. No. US 1989-422699, filed on 17 Oct 1989, now abandoned which is a continuation-in-part of Ser. No. US 315342 , said Ser. No. US 569920 which is a continuation-in-part of Ser. No. US 422699 And Ser. No. US 483913 , said Ser. No. US 600024 And Ser. No. US 599543 which is a continuation-in-part of Ser. No. US 569920 , said Ser. No. US 616374 which is a division of Ser. No. US 422613		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Kemmerer, Elizabeth C.		
LEGAL REPRESENTATIVE:	Testa Hurwitz & Thibeault, LLP		
NUMBER OF CLAIMS:	19		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	82 Drawing Figure(s); 49 Drawing Page(s)		
LINE COUNT:	5540		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are (1) osteogenic devices comprising a matrix containing substantially pure natural-sourced mammalian osteogenic protein; (2) DNA and amino acid sequences for novel polypeptide chains useful as subunits of dimeric osteogenic proteins; (3) vectors carrying sequences encoding these novel polypeptide chains and host cells transfected with these vectors; (4) methods of producing these polypeptide chains using recombinant DNA technology; (5) antibodies specific for these novel polypeptide chains; (6) osteogenic devices comprising these recombinantly produced proteins in association with an appropriate carrier matrix; and (7) methods of using the osteogenic devices to mimic the natural course of endochondral bone formation in mammals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 10 OF 39 USPATFULL on STN

ACCESSION NUMBER: 1999:106108 USPATFULL

TITLE: **Compositions** and therapeutic methods using morphogenic proteins and stimulatory factors

INVENTOR(S): Lee, John C., San Antonio, TX, United States  
Yeh, Lee-Chuan C., San Antonio, TX, United States

PATENT ASSIGNEE(S): Stryker Corporation, Kalamazoo, MI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5948428		19990907 <--
APPLICATION INFO.:	US 1996-761468		19961206 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-570752, filed on 12 Dec 1995		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Azpuru, Carlos		
LEGAL REPRESENTATIVE:	Fish & Neave, Haley, James F., Ruskin, Barbara A.		
NUMBER OF CLAIMS:	78		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	17 Drawing Figure(s); 16 Drawing Page(s)		
LINE COUNT:	3767		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides pharmaceutical **compositions** comprising a morphogenic protein stimulatory factor (MPSF) for improving the tissue inductive activity of morphogenic proteins, particularly those belonging to the BMP protein family. Methods for improving the tissue inductive activity of a morphogenic protein in a mammal using those **compositions** are provided. This invention also provides implantable morphogenic devices comprising a morphogenic protein and a MPSF disposed within a carrier, that are capable of inducing tissue formation in allogeneic and xenogeneic implants. Methods for inducing local tissue formation from a progenitor cell in a mammal using those devices are also provided. A method for accelerating allograft repair in a mammal using morphogenic devices is provided. This invention also provides a prosthetic device comprising a prosthesis coated with a morphogenic protein and a MPSF, and a method for promoting in vivo integration of an implantable prosthetic device to enhance the bond strength between the prosthesis and the existing target tissue at the joining site. Methods of treating tissue degenerative conditions in a mammal using the pharmaceutical **compositions** are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.